

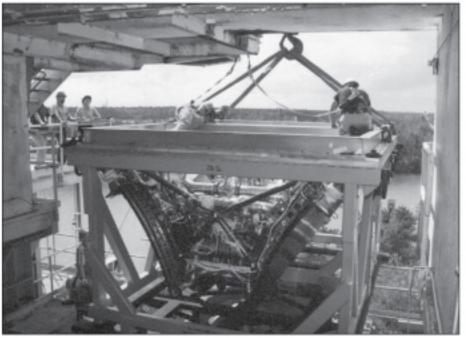
# LAGNIAPPE

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October 19, 2000



Stennis technicians guide the tandem configured linear aerospike engines that will power the X-33 technology demonstrator onto the A-1 stand. The engines were delivered to the stand Sept. 19 and moved into place for dual-engine testing that will begin later this year.

# Linear aerospike engines for X-33 installed on A-1 stand for critical dual-engine tests

The final test phase for qualifying the innovative linear aerospike flight engines that will power the experimental X-33 vehicle just moved one step closer.

Recently, technicians at Stennis Space Center completed dual-engine assembly and delivered the engines to the A-1 test stand, where they were mounted for testing to begin later this year.

The X-33 is a half-scale, suborbital technology demonstrator of Lockheed Martin's proposed commercial reusable launch vehicle called VentureStar<sup>TM</sup>. A Lockheed Martin-led industry team and NASA are developing the X-33. The linear aerospike engine components are built by the Rocketdyne Propulsion & Power unit of The Boeing Company but are assembled at Stennis.

A NASA and Boeing Rocketdyne team at Stennis successfully completed singleengine testing in May. The single-engine test phase involved 14 tests and accumulated more than 1,500 seconds of operation, the equivalent of about seven X-33 flights.

After the completion of single-engine testing, technicians removed the linear aerospike from the test stand and stored it.

Crews recently completed modification of the test stand to accommodate the dualengine configuration.

Dr. Don Chenevert, NASA's X-33 project manager at Stennis, said single-engine testing went smoothly and accomplished all major objectives, including full-power throttling and testing propellant and fuel mixtures. He added that he expects the engines to continue performing well during dual tests.

The Space Shuttle Discovery lights up the Florida sky Oct. 11 on the 100th shuttle mission to continue preparing the International Space Station for its crew.

### SSMEs power 100th Space Shuttle flight

Discovery's seven astronauts blasted off from the Kennedy Space Center during a spectacular evening launch Oct. 11 at 6:17 p.m.

CDT. The purpose of this mission, the 100th in Space Shuttle history, was to deliver the first external framework structure and a new docking port to the International Space Station.

Commander Brian Duffy, Pilot Pam Melroy and Mission Specialists Leroy Chiao, Bill McArthur, Jeff Wisoff, Mike Lopez-Alegria and Koichi Wakata rocketed away from Launch Pad 39-A, lighting up the central Florida skies as they began their pursuit of the international complex. At the time of launch, the ISS was orbiting at an altitude of about 230 statute miles over the Indian Ocean east of India.

Less than nine minutes after liftoff, Discovery's crew went to work to prepare

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### Director's Dialogue

from Center Director Roy Estess



### The Close Call Conspiracy

Have you ever wondered what's the big deal about reporting close calls? Who has the time? Don't they just lead to trouble? What's in it for me?

Well, Headquarters' John Lemke calls our need for attention to close calls a conspiracy. And it is. But a conspiracy to do what?

Our Safety and Mission Assurance organization would tell us that reporting close calls helps us to find hazards that might otherwise go undetected and prevent them from coming back as something much worse. Reporting also allows for trending and finding systemic problems across the center. That's nice.

But, there is more! Reporting close calls is really a "sidious" (opposite of insidious) plot to get everyone to look for things that go wrong so that they can be fixed. It is the best way to maximize the number of eyeballs looking for ways to keep each one of us safe, in whatever we do — looking for ways to make sure that we go home to our families healthy at the end of the day. The number of close calls on any given day is sobering. Most of us don't even notice them because our brains have been hard-wired to tune out bad news. This is OK when it concerns football or politics, or

It is definitely not OK when it concerns safety.

In addition, reporting close calls is necessary to reinforce the habit of staying aware and alert in our workplace. And, being aware and alert will reduce the number of close calls. The "conspiracy" is that over time the loop will close so that no close call reports will lead to no mishaps.

Over time, there is a relationship between the number of close call reports and the number of mishaps. If mishaps are still occurring and there are few close call reports, people are holding back. We are all committed to carrying out NASA's mission. But surely, above even that, we are committed to the safety of our co-workers, our neighbors, our friends. Reporting close calls is a very real way to demonstrate that commitment.

### NASA co-sponsors technology summit

NASA Administrator Dan Goldin will join Louisiana Governor M.J. "Mike" Foster in co-sponsoring a research and technology summit Monday, Oct. 23 at the Pennington Biomedical Research Center in Baton Rouge, La.

The summit will encourage an exchange of information leading to partnerships between NASA and Louisiana businesses and universities. Louisiana's Vision 2020 Initiative outlines technology clusters that can be linked to NASA's unique expertise and capabilities gained through the exploration and development of space.

Vision 2020 is a guide to economic renewal and diversification that moves Louisiana industry into emerging technology areas. These areas are medical and biomedical, micromanufacturing, telecommunications, environmental, food technologies, and advanced materials.

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#### **NEWSCLIPS**

NASA's next trip to the red planet -As NASA's next spacecraft to the red planet begins a crucial round of testing in preparation for launch next year, the mission has been given a new name: 2001 Mars Odyssey, "NASA's next mission to Mars, launching in the year 2001, represents the start of a new wave of exploration to the red planet," said Scott Hubbard, Mars program director at NASA Headquarters in Washington, D.C. The 2001 Mars Odyssey is scheduled for launch in April 2001 and should arrive on Mars in October 2001. The mission is managed by the Jet Propulsion Laboratory (JPL) for NASA's Office of Space Science. Lockheed Martin Astronautics in Denver is JPL's industrial partner.

Hubble movies show changing faces of young stars — Extraordinary timelapse movies taken by NASA's Hubble 
Space Telescope show that spectacular 
outbursts from young stars can change 
dramatically over a period of just weeks 
or months. Documenting the startling 
activity in the early stages of a star's life, 
Hubble viewed jets of gas plowing into 
space at hundreds of thousands of miles 
per hour, and moving shadows many 
billions of miles in size. Images and animation may also be found on the 
Internet at <a href="http://oposite.stsci.edu/">http://oposite.stsci.edu/</a>.

Fountains of fire illuminate solar mystery - Giant fountains of fastmoving, multimillion-degree gas in the outermost atmosphere of the Sun have revealed an important clue to a longstanding mystery - the location of the heating mechanism that makes the corona 1,000 times hotter than the Sun's visible surface. Scientists discovered an important clue while observing immense coils of hot, electrified gas, known as coronal loops. They now appear in unprecedented detail with NASA's Transition Region and Coronal Explorer (TRACE) spacecraft, NASA Administrator Dan Goldin recently helped unveil the new TRACE images.



The crew of Space Shuttle Discovery rendezvoused with the destination of their mission, docking with the International Space Station (ISS) on Oct. 13.

While at the station, the STS-92 astronauts will connect Pressurized Mating Adapter 3 and the Z1 Truss to the station by using Discovery's robotic arm and conducting four space walks.

The Z1 contains the station's motion control system and communications equipment. The truss is also the platform on which the first set U.S. solar arrays for the station will be attached. Meanwhile, the station continues to operate in good condition with the exception of two sets of batteries in the Zvezda Service Module. The repair work on the batteries will be conducted in November by the first resident crew.

As the shuttle pursued the ISS, Commander Brian Duffy, Pilot Pam Melroy and Mission Specialists Leroy Chiao, Bill McArthur, Jeff Wisoff, Mike Lopez-Alegria and Koichi Wakata were closing in on the station by about 300 miles with each orbit of the Earth. The rate of closure slowed dramatically, however, as Duffy and Melroy conducted a series of jet firings to place the shuttle directly below the station in the final phase of its approach for docking. The final major maneuver, called the Terminal Initiation burn, occurred when Discovery reached a point about eight nautical miles directly behind the station.

As Discovery moved within about a half-mile of the station, Duffy took over manual control of the shuttle's approach, flying the shuttle from controls in the aft cockpit.

At the time of docking, the ISS and Discovery were flying over the Ukraine.



Five Stennis Space Center employees have been honored with NASA Space Flight Awareness Awards. The Space Fight Awareness program was established to prevent human error by instilling in civil service and contractor employees an awareness of personal responsibility for shuttle missions. From left, Stennis Space Center Director Roy Estess presents awards to Lockheed Martin Space Operations, Stennis Programs' employee Daniel Lewis of Lumberton; NASA's Gay Irby of Long Beach; Mississippi Space Services' employee Jim Wolfenbarger of Pass Christian; NASA's Mary Whitehead of Diamondhead; and The Boeing Company, Rocketdyne's employee Jack Fabre of Slidell, La.



Ground was broken Sept. 29 on a new facility at Stennis Space Center that will support the Naval Small Craft Instruction and Technical Training School (NAVSCIATTS) and Special Boat Unit Twenty-Two. Construction of the facilities to be built on 150 acres in the fee area along the Pearl River is valued at \$25 million. Plans call for an administrative headquarters building, classroom facility, galley, supply facility and maintenance facilities. The Roy Anderson Corporation of Gulfport is in charge of construction, which is scheduled to be finished by 2002. Shown are, from left, LCDR Frank Stich, Naval Special Warfare Command; Harold Bosse, command engineer; CDR Benny Green, SBU commander; Stennis Space Center Director Roy Estess; LCDR Michael Lumpkin, NAVSCIATTS commander; Jim Hardin, director of construction for Roy Anderson Corporation; and CDR Bill Oster, Navy contractors officer.

## Brannon is named special assistant to Director Roy Estess

Commercial Remote Sensing Program Director David Brannon was recently named special assistant to Stennis Space Center Director Roy Estess. Brannon will serve as



Brannon

Estess' principal advisor for matters relating to definition, strategic planning, direction and administration of commercial space development activities for the center.

"In this capacity, David will support the Human Exploration

and Development of Space Enterprise and the Agency to develop and integrate a global, commercial developmental perspective," Estess said. "As the Stennis mission evolves, it has become increasingly apparent that we need to capture all commercial aspects to strengthen our continued growth.

"David's in-depth knowledge of new technologies and emerging trends will provide the robustness needed for this new position," he said.

Brannon began his new responsibilities Sept. 25.

# Federal employees health fair spotlights insurance options

Stennis Space Center's Federal Employees Health Benefit Fair is scheduled for 9 a.m. to 2 p.m. Thursday, Nov. 16 in the Bldg. 1100 cafeteria lobby for NASA employees.

Insurance representatives invited to attend and discuss choices with federal employees for health benefits in 2001 include: Blue Cross/Blue Shield of Mississippi, Blue Cross/Blue Shield of Louisiana, APWU Benefit Plan, GEHA, Mailhandlers Benefit Plan, NALC, Postmasters Benefit Plan, AETNA U.S. Healthcare and Maxicare. The open season for 2001 benefits runs Nov. 13-Dec. 11. Elections are effective Jan. 14.

For more information, contact Camille Biojack-Townsend at Ext. 3322.



The Mississippi Enterprise for Technology (MsET) incubator program recently celebrated the graduation of four resident client companies. The companies are Xeta International Corporation, a computer design and security company; Reflec Tech, a reflective radiant barrier insulation company; GeoTek, a geographical technology service company specializing in remote sensing and Geographical Information Systems (GIS) services and products; and AstroVision, a producer of satellite imagery of the Earth to serve commercial, scientific and educational markets. Shown are, from left, John Shade, Xeta International Corporation; Larry Williamson, Reflec Tech; Gay Cage, Geo Tek; Dr. Jim Meredith, Stennis Center of Higher Learning; Dr. Allan Falconer, receiving the award on behalf of Astro Vision; MsET Chief Executive Officer Greg Hinkebein; and NASA's Technology Transfer Officer at Stennis, Kirk Sharp.

### Four graduate from technology incuba-

The Mississippi Enterprise for Technology incubator program (MsET) celebrated the graduation of four resident client companies Oct. 4. Xeta International Corporation, Reflec Tech, GeoTek and AstroVision each outgrew program support by reaching significant goals.

The mission of the enterprise is to create, retain and attract high-skill, high-wage jobs in Mississippi through the commercialization of state and federal technologies.

"To a large extent the enterprise accomplishes its mission through assisting with the growth and development of young, technology-based companies in its small business incubator program," MsET Chief Executive Officer Greg Hinkebein said. "We provide a murturing environment for resident client companies. They are provided with crucial business and technologyrelated services, opportunities for joint ventures, entrepreneur training and access to state and federal technology portfolios." Hinkebein said statistics show that roughly 80 percent of all small businesses fail within the first three to five years. The reverse is true of small businesses that establish a foothold in small business incubators. Incubators reduce the overhead associated with running a business and provide essential support services — affordable space, common facilities and equipment, entrepreneur in-residence training, and customized services packages — that would otherwise be very costly or unavailable.

"The program at Stennis is uniquely positioned to support technology-based start-up companies," Hinkebein said. "The primary distinction between MsET and other small business incubators is our access to the vast repositories of technology throughout the state."

The Enterprise is a joint effort of the Mississippi Department of Economic and Community Development, NASA and Mississippi's universities.



NASA's Office of Human Resources recently recognized new employees at Stennis Space Center during a reception in the Bldg. 1100 atrium. Center Director Roy Estess and Center Deputy Director Mark Craig were on hand to lead festivities. In alphabetical order, new employees include: Tony Bowen, David Burris, Gregory Carmouche, Cheryl Cuevas, Carlos Del Castillo, Marilyn Donald, Tran Duong, Lionel Dutreix, Jason Edge, Mary Ellison, Jonathan Etheridge, Bruce Farner, Jorge Figueroa, Jeanann Fredrick, Paul Galusha, Anthony Goretski, Richard Harris, Marsha Hopkins, Scott Jensen, Casey Kirchner, Shelly Lewis, Michele Logan, Jeffery Lott, Marjorie McGraw, Jo Ann Molizon, Buddy Newbold, Deborah Norton, Richard Rauch, Christine Reynolds, David Roberts, Debra Rushing, Harry Ryan, Karen Swofford, Philip Swofford, Leslie Taylor-Grover, Rachelle Todd, Andrew Valente, and Maury Vander.

# Breast cancer survivor recommends self-exam and vigilence as part of NASA Federal Women's "Lunch and Learn" series

Dr. Paul Monsour, a radiation oncologist serving with six cancer radiation treatment centers in the New Orleans area. and male breast cancer survivor Joe Taylor discussed breast cancer awareness Oct. 11 at Stennis Space Center as part of the NASA Federal Women's Program Advisory Council's "Lunch and Learn" series on breast cancer awareness.



Dr. Paul Monsour is a radiation oncologist in the New Orleans area.

Dr. Monsour explained that not all breast cancers are detectable by touch and recommends periodic mammograms for women. He also emphasized that, in contrast to the highly invasive procedures involved in mastectomy, current breast

cancer treatment is moving toward the more conservative lumpectomy coupled with directed radiation therapy.

"Survival rates are comparable for the two procedures, but the added benefit of lumpectomies and radiation is much less invasion and

a more cosmetically pleasing result," he said.

Taylor, a 78-year-old raisin

salesman, was diagnosed with male breast cancer early in 1999 and had surgery in June 1999.

"I'm proud to have survived," Taylor

said.

According to Taylor, the diagnosed incidence of male breast cancer is small with 100 cases diagnosed nationwide in 1999. Only an estimated 1 percent of the men with male breast cancer are ever diagnosed, according to Taylor. He encouraged men to conduct self examinations and, if they find a lump, to take the problem to a doctor.



Breast cancer survivor Joe Taylor discovered his cancer in 1999.

### If it has to do with construction at Stennis, Miller is not far away

Where there's smoke, there's fire; and where there are plans for construction at Stennis Space Center — and there's plenty of that these days — there's Kirk Miller.

As chief of Facility Engineering for NASA's Center Operations and Support Directorate at Stennis, Miller is in charge of design engineering for both new building construction and renovation projects.

"We're managers and technical monitors," Miller said. "In that capacity, we pull together long-range plans."

That means Miller is not far from just about any construction on the site. Miller's department is in charge of new facility designs, as well as renovations, and the department serves as a liaison between resident agencies and NASA Headquarters to obtain Headquarters' approval on projects.

Center Ops Facility Engineering Division includes eight engineers and a secretary. The team oversees electrical, civil and mechanical engineering, as well as architectural designs.

Miller said he has served in his current capacity at Stennis for 11 years. The job never gets old, though, because of the diversity of resident agencies and construction jobs, he said.

Among the biggest jobs recently is one that is just about finished that will add a new wing of office space to Bldg, 1100. It will house offices for NASA, the Navy and others.

Center Ops oversees the whole construction process from putting together specifications and drawings for building



projects to bids.

Another major job includes design oversight of the Rocket-Based Combined Cycle (RBCC) project, a new \$26-million test stand just off Propellant Boulevard.

Miller's department also was in charge of the design of the renovation of the B-1 and B-2 test stands for the Boeing Company, which is testing its RS-68 engine there. Center Ops also oversaw design modifications to the A-1 test stand where the linear aerospike engine is being tested for the X-33 program.

Other recently completed projects include the E test complex and the renovated and expanded visitor center, now called SterniSphere.

Miller joined Stennis back in 1989. Though he had done similar work for the Army, the scenery certainly is different.

Miller came here from Kwajalein, a 3-mile-by-1½-mile island in the Marshall Islands in the central Pacific. While he was there, he was supervisor of the engineering department for the Army and supported test missile defense systems and development of interceptors with facility designs and construction.

The road to Stennis started in Cody, Wyo. That's where he finished high school. Then it was on to Montana State University in Bozeman. After graduation, he worked for a private consulting firm as a Civil Engineer in Cody and then worked in Meeteetse, Wyo., where he met his wife of 27 years, Mary.

Miller also worked for seven years with an oil company, where he learned about refineries, pipelines, fluid flows, piping and valving, gaining experience in mechanical engineering and later ran his own engineering consulting firm — pretty good experience for what he would wind up working with at Stennis.

Miller and his wife now live between Mandeville and Slidell in Lacombe, La. They have two daughters, Kari, 25, a student at the University of Southern Mississippi, and Kori, 23, who lives with her husband in Slidell.

Mary feeds her artistic flair by creating stained glass objects in her studio at home. She also paints.

Meanwhile, an avid fisherman, Kirk fills out some of his free time reeling in specs and redfish in some of the abundant marshes and waterways in the area.

Ever the engineer, he also likes to take on some construction projects around the house. Odds are they probably don't quite compare to some of the ones he tackles here at Stennis, though.



Final work is being conducted on the new wing of Bldg. 1100. Here, employees with Tilley Constructors & Engineers Inc. of Gulfport prepare the framework for a sidewalk before the cement is poured. Shown from left to right are, kneeling, Brian Verdigets of Pass Christian and Grady Ladner of Picayune, and standing, Robert Price and Llyowane McGough, both of Picayune.

### Shuttle brings down-to-Earth discoveries

Discovery flew into the history books Oct. 11 as the 100th launching of the Space Shuttle fleet.

For nearly two decades, the Space Shuttle has been the cornerstone of the U.S. space program — the world's only reusable spacecraft. It's the first vehicle in the history of space flight that can carry large cargoes, such as satellites and spacecraft parts, both to and from orbit.

The technology used to create the most versatile and most advanced spacecraft ever built also touches the lives of people here on Earth. After 100 flights, the benefits to industry, medical research and to the quality of daily life easily match the number of missions.

More than 100 documented NASA technologies from the Space Shuttle are now incorporated into the tools you use, the foods you eat, and the biotechnology and medicines used to improve your health.

"We often take for granted the returns on NASA's past investments: everything from global satellite telecommunications to disposable diapers is the result of our investment in space technology," said NASA Administrator Dan Goldin. "The mission of the Space Shuttle is no different. The program's goal is to play a lead role in opening the space frontier, but it's also about bringing the discoveries of the Space Shuttle into your home."

Some of the returns from some of NASA's past Space Shuttle investments include:

Faster Diagnostics: NASA technology was used to create a compact laboratory instrument for hospitals and doctors' offices. This device quickly analyzes blood, accomplishing in 30 seconds what once took 20 minutes with conventional equipment.

Land Mine Removal: The same rocket fuel that helps launch the Space Shuttle is now being used to save lives — by destroying land mines. A flare device, using leftover fuel donated by NASA, is placed next to the uncovered land mine and is ignited from a safe distance using a battery-triggered electric match. The explosive burns away, disabling the mine and rendering it harmless.

Tracking Vehicles on Earth: Tracking information originally used for Space Shuttle missions now helps track vehicles here on the ground. This commercial spin-off allows vehicles to transmit a signal back to a home base. Many cities today use the software to track and reassign emergency and public works vehicles.

### AEROSPIKE . . .

(Continued from Page 1)

"I'm excited about moving into this phase of testing. Single-engine tests were remarkable, and I expect the upcoming dual-engine tests to perform equally as well," he said. "I think Boeing's got a winner in this engine."

The dual-engine phase calls for nine tests, with the engines to be tested in tandem in their flight configuration. This phase of testing will verify the seal between the two engines; dual-engine start, stop and operational parameters; and the ability for the engines to control the X-33's direction of flight by varying the thrust from side to side and engine to engine.

Testing will also verify the ability of one engine's turbo-machinery to power both engines should a set of turbo-machinery fail during flight.

Boeing Rocketdyne developed the engine at its Canoga Park, Calif., facility. Final engine assembly was done by the NASA/Boeing Rocketdyne team at Stennis.

The X-33 project is being developed under a cooperative agreement between NASA and Lockheed Martin Aeronautics Company in Palmdale, Calif. Marshall Space Flight Center in Huntsville, Ala., manages the X-33 program for NASA.

### STS-92 ...

(Continued from Page 1)

the Shuttle's systems for their planned 11-day mission. The first major task on the flight plan was to open Discovery's cargo bay doors prior to receiving a "go" for orbital operations from Ascent Flight Director Wayne Hale. The astronauts were also to set up computers and flight deck gear.

With the successful launch behind them, Discovery's astronauts turned their attention to their chase of the International Space Station. They performed several firings of the ship's jet thrusters over the next two days to set up a docking with the outpost on Friday at 12:43 p.m. CDT.

Over the ensuing week, the crew was to install the Z1 truss structure and a third Pressurized Mating Adapter to the Unity module and perform four space walks to electrically connect the new components.



Dr. David Powe, chief of NASA's Education and University Affairs Office at Stennis Space Center, recently addressed faculty and students at the Hattiesburg campus of the University of Southern Mississippi (USM) on geospatial workforce development. Powe explained the various kinds of work performed at Stennis, concentrating on the developing technologies of commercial remote sensing and GIS global positioning. Pictured from left are Dr. Powe; Dr. John McGowan, chief technology officer for USM; Heather Annulis, assistant professor of USM's School of Engineering Technology; and Dr. Cynthia Gaudet, coordinator of Workforce Training and Development for USM's School of Engineering Technology.

# Safety Foresight Corner can help to escape hotel fire

Hotel fires can be frightening and dangerous experiences. Contrary to popular TV or movie scenes, however, fire is not likely to chase you down and burn you to death. The by-products of fire — super heated fire gases (smoke) and panic — are what most often prove fatal. Occasional and frequent travelers alike should think in advance about how to survive a hotel fire. Here are a few tips.

Smoke — Where there is smoke, there is not necessarily fire. A smoldering mattress, for instance, will produce great amounts of smoke. You should keep that in mind, because 70 percent of hotel fires are caused by smoking and matches. Air conditioning and air exchange systems will sometimes pick up smoke from one room and carry it out to other rooms or floors. In any case, your prime objective should be to leave at the first sign of smoke.

Panic — Panic is a sudden, overpowering terror that can develop the moment you discover you're lost, disoriented, or you don't know what to do. People in a state of panic are rarely able to save themselves. If you understand what's going on, what to do, where to go, and how to get there, panic will not set in.

> By Cpt, R.H. Kauffman Los Angeles County Fire Department

### QUICK LOOK

- Anyone interested in improving speaking and presentation skills is invited to join the Speakeasy Toastmasters. The organization meets on the first and third Thursday of each month, from 11:30 a.m. to 12:30 p.m. in the Bldg. 1100 Conference Center. Guests are welcome. Membership is open to Stennis personnel and nearby residents. For details, call any Toastmaster officer: Susan Dupuis, Ext. 3683; Catherine Griffon, Ext. 4439; David Alston, Ext. 2808; or Leigh Schaumburg, Ext. 5165.
- Daylight Savings Time begins at 2 a.m. Sunday, Oct. 29. Be sure to set your clocks back one hour. Also, remember to reset coffeemakers, VCRs and other appliances. Fire prevention specialists also suggest checking or replacing smoke alarm batteries.
- The annual Halloween Party & Costume Contest sponsored by the Stennis Space Center Recreation Association is set for 4:30 p.m. on Friday, Oct, 27 at the Cypress House. The free event includes snacks and entertainment by Steve "Whoopie" Kellar. Costume contest participants must be at least 21. Judging begins at 6:30 p.m., with prizes awarded for first, second and third place.

### SUMMIT ...

(Continued from Page 2)

The summit will also serve as an opportunity for NASA to benefit from university research and industrial competencies that may lead to enabling technologies for NASA mission needs.

The goal is ongoing communication that will lead to future partnerships. Louisiana businesses and universities are encouraged to attend and learn about research and technology development opportunities with NASA, as well as several other federal agencies located at Stennis.

The summit will provide a full day of information exchange sessions among NASA, resident agencies at Stennis Space Center, Louisiana universities, and industry specialists.

The research and technology summit is also sponsored by the Louisiana Department of Economic Development, the Louisiana Board of Regents, the Louisiana Business and Technology Center, the Louisiana Technology Transfer Office, and the Pennington Biomedical Research Center.

For more information, visit the Louisiana Research and Technology Summit Web site at <a href="https://www.doce.lsu.edu/la-techsummit"><u>www.doce.lsu.edu/la-techsummit</u></a> or call the LSU Division of Continuing Education at (225) 388-6774 to request a registration form.

#### LAGNIAPPE

Lagutappe is published monthly by the John C. Stennis Space Center, National Aeronautics and Space Administration. Roy Estess is the center director, Myron Webb is the public affairs chief, and Lanee Cooksey is the news chief. Comments and suggestions should be forwarded to the Lagniappe Office, Bldg. 1200, Room 208D, Stennis Space Center, MS 39529, or call (228) 688-2313.

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